

# Debt Covenants of Finnish Companies and their Reporting in Financial Statement

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### **Abstract**

This study examines what covenants are used in Finnish companies, the reporting of covenants in financial statement and what characters can be found in companies with capital, performance or both types of covenants. The study is based on a sample of 30 Finnish companies which represent 27 percent of non-financial companies in stock market of Helsinki (OMX Helsinki). The financial figures and information of covenants are from financial statements and Orbis database. The results show that 70 percent of the companies in the data reported covenants in financial statement. The most common ones were equity ratio, net debt to EBITDA and net gearing which are financial covenants. The use of negative and positive covenants was modest of which negative covenants were more common.

I used eight different variables that measured performance, leverage, size, risk and the largest shareholder to explain the characters of companies with capital and performance covenants and to explain covenant reporting quality. The results suggest that larger and big middle-sized companies have more probably only capital covenants, while companies that have higher amount of interest-bearing debt and a smooth performance during the years may have more likely only performance covenants. In the sample, only small companies with a poorer performance on average, had both capital and performance covenants at the same time.

The results show also that companies with good performances and strong balance sheets are either reporting covenants with superior quality or not reporting covenants at all. Companies that did not report covenants at all had also a much higher market value in relation to assets on average whereas companies that reported with superior quality are having more probably the government or an insurance company as the largest owner. Companies with high levels of leverage ratios and low level of equity ratio reported covenants more probably but without superior quality, which may affect the decision making of stakeholders.

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**Keywords** Financial covenant, Capital covenant, Performance covenant, Leverage, Agency cost, Corporate governance, Monitoring, Violation, Interest-bearing debt, Stakeholder, Financial reporting, trade-off

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## **1. INTRODUCTION AND MOTIVATION FOR THE RESEARCH**

Covenants are specific terms of loan agreements used in corporate finance, which purpose is to protect the claims of creditors by limiting the actions of the borrower. Covenants are negotiated between the lender and the borrower that describes what the company can and cannot do and how it can operate within certain limits and situations. Thus, covenants are agreed as a condition of borrowing which aim to reduce agency costs that comes from managers' and shareholders' possibility to transfer wealth from debtholders by taking certain actions that are against the interest of debtholders (Taylor, 2013). The violation of the covenant leaves the lender an option to act as it is agreed in the contract which may mean requiring immediate repayment before maturity or renegotiations for example the cost of capital, restricting existing ones or adding additional covenants (Roberts and Sufi 2009). This shows that the covenants are important and they affect the operations and financial structure of companies. Therefore, covenants produce crucial information to the stakeholders who analyze the financial statement of the company.

Previous studies have mainly focused on the main functions of debt covenants (Dichev and Skinner, 2002; Niskanen & Niskanen, 2004) especially factors like covenant violation (Nini, Smith and Sufi, 2012), and renegotiation (Roberts and Sufi, 2009). There has been also a study on differences between the capital and performance covenants (Christensen and Nikolaev, 2012) and other studies like the role of financial reporting (Taylor, 2013) and accounting quality (Callahan, Leone, Yang and Zhang, 2014) on debt covenants.

However, there have not been studies on reporting of debt covenants in financial statement nor what differences can be found in companies with performance covenant and capital covenants. There seems also arise a problem in Finnish companies financial statement information on debt covenants. The Finnish accounting act describes that companies must follow the principle of "true and fair view" when reporting covenants in financial statement (EY, 2014) which is based on companies own interpretations. This does not stop companies from reporting covenants with a bad quality nor showing them at all. Stakeholders may do different decisions than they could do with full and adequate information. For example, unsuspected stakeholders like potential investors rely on the information presented in financial statement which can mislead them from the true risks of the company. Therefore, not reporting debt covenant or reporting with a poor quality can affect the decision making of stakeholders. It is necessary to know when the control right shift to debtholders and what actions the company can take and how close are the constraints. The lack of representation or deficient information offers also valuable information of the company's situation and it should

raise questions like why the management is not showing the covenants in their financial statement? This may occur in certain types of companies and there may be many different factors that impact the quality of representation.

This study is going to answer three questions; What covenants are used in Finnish companies? Do companies differ with capital and performance covenant? And what influence the presentation of covenants in financial statement? This empirical study contains data of 30 Finnish companies that are representing the stock market of Helsinki (OMX Helsinki). Then these companies are analyzed with eight different factors that measures the performance, leverage, size, risk and the largest shareholder. These companies are also sorted into three groups based on the type of covenants they have. The first group contains companies with only performance covenants, the second instead contains companies with only capital covenants and the last group have companies that have both type of covenants. Then these groups are analyzed with the eight factors with an intention to find certain characteristics that define what type of covenants are present in which type of companies. The other part of the empirical study analyzes the quality of covenant reporting in financial statement. To this part, I created four categories based on the quality of the information given about the covenants. The companies are then sorted to these groups and analyzed with the eight factors to find what common character companies have with different quality of reporting.

This study starts by shedding light on debt covenants and why they are so important in view of stakeholders, by going through the purpose of debt covenants. Then the study shows what type of covenants exist and how they fall into different categories while the last part of the literature review concentrates on covenant violation. Then the second part of the study focuses on showing how the empirical data and the research method are formed presenting the eight factors and the created quality categories. The last part of this study presents the main results and conclusions based on them.

It is important to stress that this type of study has not been done before. The paper will not focus on the levels of covenants nor the process of negotiations and how the covenant levels and constraints are formed. Renegotiation that are followed due to violation and the connection of loans to the covenants are also left out of this study.

## **2. THE PURPOSE OF DEBT COVENANTS**

One of the main purposes of covenants is to decrease agency costs between debtholders and shareholders. They also have the power to increase the company's market value (Nini et al., 2012) and total monitoring of the company (Rajan and Winston, 1995). Besides they define when the control right shifts to creditors which emphasizes the role of creditors in corporate governance (Day and Taylor, 2004). In the next section, we are going through these topics that stresses out the importance of debt covenants that brings value to the users of financial statement.

### **2.1 Agency problems and corporate governance**

As previous study shows shareholders and debtholders have many conflict of interest (Black, 1976). Debt covenants reduce the agency cost which comes from the potential incentive of managers and shareholders to transfer wealth from debtholders (Taylor, 2013). This happens by diluting the claims of the borrower by doing for example dividend overpayments, excessive borrowing, underinvesting or asset substitutions (Taylor, 2013; Niskanen and Niskanen, 2004). Covenants restrict these factors and actions that furnish control rights to the lender which also proves the importance of debtholders in the role of corporate governance.

The control right that the covenant brings, decreases the problems of borrower adverse selection and moral hazard (Rajan and Winston, 1995). This means that the asymmetric information between the lender and the borrower decreases, thus the lender will have more information and knowledge about the borrower. This is mainly because the covenants encourage the creditor to monitor the company more efficiently (Rajan and Winston, 1995). The lender will also have a chance to affect ex ante the capital structure and cash flows of the company which also decreases the asymmetric information, since the company will be fully transparent to the lender after a proper due diligence and covenant and terms planning. As we see, there is a trade-off between the cost of contracting and the agency costs.

The contracting is efficient when the debt contracting contains a trade-off between the agency costs reduction and the cost of contracting which the company must balance and find the optimum level (Smith and Warner 1979). This means that the more the creditor wants to decrease the agency costs, the more it needs to increase the input in contracting and add more covenants and constraints. This instead increases the amount of costs of contracting which means that the debtholders should add an adequate amount of restriction or else it may pay too much for additional benefits and vice versa.

Another trade-off seems to arise in the use of debt covenants. Lenders that are setting the covenant are balancing between the cost of violation and the benefits from identifying the problem before the violation occurs (Dichev and Skinner, 2002). The less the lender wants to invest in covenants the higher the probability that they end up finding out problems too late. Instead if the lender is investing too much in monitoring they will end up paying overmuch in relation to the benefits of identifying problems before the violation occurs.

The classic view of covenants is that they control the agency cost of debt thus, the restriction on managerial behavior maximizes the value of the company and the wealth of investors (Jensen and Meckling, 1976; Smith and Warner, 1979). When the company act more in view of maximizing the value of the company, both debtholders and shareholders will benefit from it. Debtholders will have their claims without any problems and shareholders will enjoy an increase in the firm value. Since covenants play such an important role in decreasing agency costs, it is also relevant to report them in financial statement. The information produced by them is useful and may be crucial in certain situations to stakeholders who analyze the company. There are some determinants that seems to indicate a greater probability of a high level of agency costs which are high default risk, high gearing, incumbent management, corporate governance problems and small firms size (Taylor, 2013). This means that we should expect to see companies with one or many of these indicators to have more covenants and restrictions than companies do in average. This instead should increase the quality of presenting in financial statement since, the covenants become more relevant.

The debtholders play an important role also outside the payment default states (Nini et al., 2012). This means that changes in the company happens way before the company may go to bankruptcy or payment default. This shows instead that the debt covenants are used as an early warning signal that indicates that the firm is not going to the direction where the debtholders would like them to move. This means that if the company is not showing covenants in the financial statement, covenant violation may occur as a surprise for stakeholders who were not aware of them in the first place.

Previous study suggests that capital covenants control agency problems when the company must maintain a certain amount of equity capital which will create an equilibrium in the incentives of debtholders and shareholders (Christensen and Nikolaev, 2012). The shareholders must have enough money in the company so that the shareholders' value is sensitive to the actions of the managers thus, creating motive to monitor the management (Smith and Warner, 1979). When the shareholders have more to lose, they will also tighten their grips which proves that the covenants not only benefit the debtholders but also the shareholders. This is also a trade-off that should set to a point where marginal

revenues are equal to marginal losses. The revenue would be that the management act in the best interest of shareholders and the loss represents the cost of monitoring. But can we expect that the management report covenants with a good quality when they act more in the interest of shareholder?

The fact that the world is constantly changing, it has changed the business world and the use of covenants among the stakeholders. Also, fast changes and trends on loan markets and the increased globalization has led to a broader international use of debt covenants which has increased the importance of covenant-based corporate governance (Day and Taylor, 2004). As previous study shows, both shareholders and creditors are important from the view of corporate governance (Nini et al., 2012). Covenants has the power to change power from management to creditors that influence the act of management in a way that they are willing to avoid technical violation. One reason for this is that post violation CEO turnovers are very common (Nini et al., 2012). This may have some explanatory power to poor quality since we can assume that management do not like the use of covenants. Thus, covenants do not only act as a tripwire but they also improve the efficiency and flexibility of financial contracting (Berlin and Mester, 1992: Magee and Sridhar, 1994 and Park, 1994). The reason for this is because with covenants creditors can extend the maturity of the loan when needed (Niskanen & Niskanen, 2004). We can claim that an efficient and flexible contract will benefit both parties with less costs and time.

When companies have many covenants, we can assume that there are many agency cost between the debtholder and shareholders, which instead stresses the importance of covenants reporting. The quality should be adequate for understanding better the role of debtholder in viewpoint of corporate governance and agency costs.

## **2.2 Covenants as a tool for monitoring**

Covenant are used to encourage monitoring, because they bring value only if the lender monitor efficiently (Niskanen & Niskanen, 2004). As we saw before, when the lender monitors the borrower the information asymmetry decreases and thus also the costs decreases leading to an optimal contracting. Covenants also keeps the creditor more up to date of the company's performance and financial situation which creates a better understanding of the company's full situation. Not only the debtholder, but also the other stakeholders should be able to have full information of the companies which brings a better and true understanding of the companies' condition.



Banks have more incentive to monitor firms whose performance is bad (Niskanen & Niskanen, 2004). This can be generalized to other financial intermediaries too, which means that the borrower will monitor and set tighter covenants to lenders whose financial state and performance are poor. Tighter covenants and a higher risk of violation should increase the probability of high quality covenant reporting.

Another situation where a higher level of monitoring occurs is with loans which have account receivables and inventories as a collateral than loans that have fixed assets for example real estate as a collateral (Niskanen & Niskanen, 2004). This may be because account receivables and inventories are more easily and quicker to realize. Thus, the monitoring is higher with companies that has inferior collateral rather than with companies with easily realizable and more valuable collateral. Based on this we can also claim that the more risk the borrower contains the higher is the level of monitoring. Also, when the risk is higher the more critical covenant reporting becomes as the economic value of these covenants increases to the stakeholders.

Modern finance theory suggests that financial intermediaries control and monitor the borrowers of their loans behalf of other investors (Berlin and Mester, 1992: Magee and Sridhar, 1994: and Park, 1994). This is because financial intermediaries which are usually commercial banks, insurance companies and finance companies do a risk analysis and a deep fundamental due diligence of the target company that gives them a good understanding of the company's condition. It may be possible to get more insight of the borrowers' condition with an additional cost when the company has already started to search information (Rajan and Winston, 1995).

Besides encouraging monitoring, there are also covenants that improve the level of monitoring as a whole by including other intermediaries. One example is a covenant that determinant the audit firm of the company which improves the external monitoring of accounting (Taylor, 2013). When borrowers have an internationally recognized audit company that has a higher quality of monitoring and a higher reputation they are less likely to diverge from standards as some smaller audit companies might do for customer satisfaction and retention (DeAngelo, 1981). Auditor with a high reputation have more to lose which is why they add credibility for covenants calculations (Blackwell et al.1998: Healy and Palepu, 2001).

Capital covenants seems to increase the overall monitoring of the borrower thus, it will make shareholders wealth sensitive to the actions of managers (Rajan and Winston, 1995). When the wealth of the shareholders is highly depending on the management it is more likely that the shareholders

increase their monitoring. As we see covenants are not only serving as a tripwire for borrowers and to reduce agency costs between the creditors and shareholders, but also to increase monitoring of the company. Thus, covenants give information on the level of monitoring and who is monitoring. This shows also the importance of debt covenants to stakeholders since, covenants have also a deeper purpose that affect and changes the behavior of parties.

### **3. TYPES OF COVENANTS**

In the next sections, we are going through the types of covenants and how they work. We are also going to see how financial covenants are divided into capital and performance covenants which works from different angels with a different time perspective (e.g. Christensen and Nikolaev, 2012).

#### **3.1 Positive covenants**

Positive or affirmative covenant means a specific action that the borrower must take which is described in the contract. For example, the borrower must maintain a minimum net worth of the company or submit on time the periodic financial reports (Roberts and Sufi, 2009). The borrower may have to maintain also a certain equipment, buy insurance remaining compliance with the law or maintain an equipment (Nini et al., 2012).

#### **3.2 Negative covenants**

Negative covenants are terms that prevent the company from taking some actions and potential acts like exceeding minimum threshold of debt or asset disposal (Taylor, 2013). Negative covenants may also prevent the company from changing the fundamental nature of the business, making excessive capital expenditures, paying dividends, taking additional debt or changing the control of the company (Nini et al., 2012; Niskanen and Niskanen, 2004).

The use of negative covenant can be expected to be lower when managerial incentives are aligned with the ones of debtholders by using capital covenants (Christensen and Nikolaev, 2012). This means that the negative covenants can be an alternative solution for capital covenants in certain situations. Negative covenants are important when performance covenants fail to transfer control rights to the creditor in the right time, which increases the risk of liquidation (Christensen and Nikolaev, 2012). This means that we can assume that the companies are using more probably negative covenants with performance covenants rather than with capital covenants.

There is also evidence that the bank relationship and length of it affects the covenants. Research shows that the longer the relationship seems to be, the more probably the banks are using negative covenants in Finnish companies (Niskanen & Niskanen, 2004).

### **3.3 Financial covenants**

Financial covenants are accounting based performance risk limits that usually limits company's leverage, total fixed charges, interest coverage, amount of equity and net worth (Nini et al., 2012) (More financial covenants in Appendix A). These restrictions are calculated with the numbers that can be found in the balance sheet and income statement of the company. These calculated covenants have basic standards but the calculations usually vary based on the features of the loan and the borrower which means that these covenants are customized (Li, 2010). There are also different proxies and estimates that are easier to get, in other words same terms can have different meanings in different debt agreements. One example is periodic cash flow where is usually used earnings before interest, taxes, depreciation and amortization (EBITDA) (Nini et al., 2012). Other factors that act as a proxy for cash flow are EBIT and cash from operations. Variables for debt can also differ. Some of the used ones are total debt, funded debt or net debt (debt less cash and cash equivalents).

Financial covenants are very common in debt contracts. Previous study shows that 96% of all private credit agreements in the U.S has at least one financial covenant (Robert and Sufi, 2009). Also, based on previous study, the most common covenants in the U.S loans are leverage and coverage ratio (Nini et al., 2012). In Europe, the covenant structure is different because it is more bank centralized which means that most of the loans are from banks. These banks have usually standard sets of covenants that are selected based on the borrowers' financial situation (Taylor, 2013). Bank loans contains usually mostly of maintenance covenants which means that in Europe there should be used mostly financial covenants (Carey et al., 1993).

The reputation of the management and their security is associated with the number and restrictiveness of financial covenants and high risk seems to be associated with increased tightness of the covenant level (Murfin, 2012). This means that we can also assume higher covenant presenting quality of these companies. According to previous study, the borrower who has violated a financial covenant in the past will have a greater probability to repeat violation later and change the lenders (Taylor, 2013). When the company has problems with a certain covenant and function of the company it is more likely that the company may have problems with the same factors again in the future. For example,

if the company has a downturn in its performance because of a decrease in sales it may have a momentum and continue to decline. Previous study shows with U.S nonfinancial companies in years 1996 through 2008 in any given year 10% to 20% firm reported a violation in one or more financial covenant at any time given (Nini et al., 2012). This shows how the violation of financial covenants are common and how they are set relatively tight. Since violations are common with financial covenants, we should expect that companies report their covenants in most of the cases due to higher relevancy.

Financial covenants are usually maintenance based in private loans which means that the borrower must keep the calculated covenant under the given level which is typically reviewed every fiscal quarter (Sansone and Taylor, 2007). When the covenant is reviewed, the creditor may change the covenant threshold to meet the current situation. In other words, the covenants can be tightened or relaxed depending of the borrower's situation. The changes are made in view of setting the new constraints just below the current actual value (Smith and Warner, 1979). Since covenants are set tightly and violations are common, they prove the relevancy of financial covenant reporting that should be done with a good quality by giving adequate information. This instead would bring economical value to the decision-making stakeholder and prevent misleading based decisions.

### 3.3.1 Capital covenants

Capital covenants are calculated and formed with the numbers from the balance sheet (Christensen and Nikolaev, 2012). With these sort of covenants the creditor can restrict the sources and uses of the company's capital. Examples of capital covenants are restriction on leverage (for example Gearing), debt-to-tangible ratios, debt-to-equity ratios, current ratios and net worth of the company (Christensen and Nikolaev, 2012) (More of the capital covenants and other financial covenants can be seen in Appendix A).

Capital covenants place restriction to the company's maximum amount of debt or minimum amount of equity by requiring that the company maintain a certain level of leverage or a net worth threshold (Christensen and Nikolaev, 2012). This means that the creditor can limit the amount of debt and affect indirectly the capital structure of the borrower. To maintain these restrictions of capital covenants the borrower can issue more equity or cut back on dividend payments to ensure that the company respect the given limits (Christensen and Nikolaev, 2012). Based on this we can claim that capital covenants can be seen, as a substitute for negative covenants since negative covenants are usually used to restrict sources and uses of capital. However, capital covenants are less able to serve as a tripwire because

these covenants are less timely and they do not focus on the current performance. This means that capital covenants are easier to avoid than performance covenants (Christensen and Nikolaev, 2012). Based on this, we can expect that the companies in the empirical study part who have only capital covenants have higher performances.

Capital covenants are still a better mechanism than performance covenants for decreasing agency problems when accounting information gives a poor understanding of the borrower's credit risk (Christensen and Nikolaev, 2012). This shows how the quality of accounting information effect the design of covenants and how it brings value to the contracting. Because capital covenants restrict the financial structure, it has an effective impact on decreasing the agency problems thus it helps to hold the current financial structure. We can expect in the study part that companies with only capital covenants are companies that would be more willing to increase leverage or who have great credit ratings who have access to lower cost debt.

### 3.3.2 Performance covenant

Performance covenants are calculated and formulated from income statement combined with balance sheet numbers forming performance or efficiency ratios (Christensen and Nikolaev, 2012). Unlike capital covenants, performance covenants do not place restrictions on the amount of debt and it does not affect as directly the financial structure of the company. Instead performance covenants require minimum performance level that the borrower must maintain. Examples of performance covenants are fixed charge coverage, debt-to-earnings, interest coverage and debt-to-cash flow ratios (Christensen and Nikolaev, 2012). (More in appendix A)

Performance covenants act as tripwires and when the performance decreases and violation occurs the covenant transfer control to the creditor. Unlike under capital covenants with performance covenants the company can increase their level of debt as long, as this new capital can be invested profitably (Christensen and Nikolaev, 2012). This means that the performance covenant violation may occur way before capital covenant which shows the time differences between capital and performance covenants. Capital covenants are based on the past cumulated profits and shareholders net capital which means that a violation may require a series of losses. In turn performance covenants are considering the current performance and the violation may occur instantly even without losses which means that the company has failed on staying within boundaries. Performance covenants indicates the future changes in equity because the equity represents the cumulative profits that are not distributes to shareholders (Christensen and Nikolaev, 2012). This shows that performance covenants

predict the future contract amendments and credit quality which is consistent with the suggestion that performance covenants act as tripwires (Christensen and Nikolaev, 2012).

Performance covenants are used often not only with capital covenants but with negative covenants which together restrict the company optimally from different angles (Christensen and Nikolaev, 2012). This is because these covenants complete each other by restricting the capital structure and the performance of the borrower creating an ensemble that protects the creditors loans from borrowers current financial and operational risks. According to previous study, the level of the borrowers' debt and the use of performance covenants have a positive correlation (Christensen and Nikolaev, 2012). This means that in the empirical part we can expect to see that companies with higher leverage should have performance covenants in their loans.

#### **4. COVENANT VIOLATION**

In this section, we are going to see how covenant violations are common and how they give options when the control right shifts to the creditor (Nini et al., 2012). The violations have a relatively low cost for creditors which is why covenants are set tightly while they are costly to borrowers which may lead to opportunistic accounting behavior (Dichev and Skinner, 2002). This shows the influential role of covenants which emphasizes the value of information they produce.

According to previous study violations occur relatively often and they are not necessary caused by financial distress. Studies also show that, over 90% of long-term contract were renegotiated before the stated maturity which occurred relatively in the early life of the contract (Roberts and Sufi, 2009). The violation may occur even if the company seems to be in a good state thus violation occurs when the company does not stay between the bounds which are usually set tightly (Dichev and Skinner, 2002). The debtholder has the right to demand immediate repayment or accelerate the payments but this is rarely the case (Nini et al., 2012). Violations may be due to technical default or cash-flow default (Taylor, 2013).

The covenant violation gives the lender an option to call or renegotiate the loan of which the renegotiation is a more preferred option (Chen and Wei, 1993; Smith 1993). This is mainly because the cost of renegotiation is relatively low to the debtholder (Dichev and Skinner, 2002). Serious violations usually mean that the company has violated multiple covenant (Chen and Wei, 1993; Beneish and Press, 1993). Usually this implies that the covenant problems occur with not just one loan but all the loans of the company (Dichev and Skinner, 2002). The cost of breaking many

covenants at the same time with multiple loans may lead to liquidations which is away from the value of the company and thus the value of shareholders, which stresses the importance of covenant reporting.

Because the cost of the violation is relatively high to the borrower (Dichev and Skinner, 2002), the manager has serious incentives to avoid these by doing opportunistic accounting choices which means usually income-, equity- or asset increasing and reduction of liabilities (Taylor, 2013). Unusually small number of firms with financial measures that are just beneath the covenant level and unusually large number of companies that meet the covenant or are above them has usually managers that are taking actions to avoid debt covenants (Dichev and Skinner, 2002). We can claim that company management start to practice opportunistic accounting the closer it gets to the level of the covenant threshold. Since covenants are usually set tightly, we can think that opportunistic accounting choices should be ordinary. One reason for why covenants are set tightly is that the renegotiation has a relatively low cost to the debtholder (Dichev and Skinner, 2002) which encourages debtholders to use covenant as a tool which gives an opportunity to change the terms according to the current situation. This will give a benefit to the debtholders which improves the viability of the loan and which makes the borrowing more efficient.

According to debt covenant hypothesis managers of the company could have incentives to make financial reporting decisions that will decrease the probability of covenant violation (Taylor, 2013). The strength of this depends highly on the costs of the technical default (Smith and Warner, 1979). Previous study shows also that in companies with good performance have managers that seems to try to avoid violation and with even a higher probability if the management can do it with a relatively low rate (Dichev and Skinner, 2002). While the benefits and costs of avoiding violations are much larger for manager in a firm that is in financial difficulty (Dichev and Skinner, 2002). When financial difficulties occur, it is necessary to stakeholders to know the possible outcomes and sanctions if the company may violate a covenant.

When a violation occurs the estimated cost of the violation is 1.2-3% of the market value of the company (Taylor, 2013). Stock prices of firms that are close to a violation of debt covenant usually have a negative stock price reaction (Core and Schrand, 1999), and after a violation they experience an even larger decline in the following months (Nini et al., 2012). Despite this, the stock price of the company reverse and their performance improves after violation which increases the value of the company on average violating firm (Nini et al., 2012). This means that there are abnormal returns that could be made because the violation occurs usually well before the firm is in a danger of payment

default (Nini et al., 2012). In previous study, they found that in their research material the abnormal return was about 5% per year which was statistically significant by using tradition event study (Nini et al., 2012).

What usually happens after a covenant violations are increased CEO turnover, decreased shareholder payouts, reduction in leverage and a decline in capital expenditure and acquisitions of companies (Nini et al., 2012). The CEO turnover explains why the management pursuit to avoid covenant violation even with dubious ways. This may also partly explain why managers do not report covenants on financial statement. There can be identified six most common responses of lender to a violation which are; Increase of collateral, increase of interest rate, addition of covenant constraints, waiver of the violation, demand for repayment and termination of the lending agreement (Dichev and Skinner, 2002). From these the most common one is the waiver of the debt and the second one is adding covenant constraints to the contract (Dichev and Skinner, 2002). Previous study shows that waivers where more likely to be granted to companies with lower probability of default on future repayment, higher credit quality and to companies which had leverage closer to a safer level (Taylor, 2013). The demand for repayment and termination of the agreement which are the most serious ones are also the rarest ones (Dichev and Skinner, 2002).

Because the violations occur often and it is rarely associated with financial distress we can claim that the companies use debt covenant violations as a screening device and usually waive the violation, reset the covenant or add new ones without having consequences that are serious to the borrowing company on average (Dichev and Skinner, 2002). The violation is still a crucial and expensive event for the company which is why the reporting of covenants with a good quality is fair to the stakeholders.

## **5. SAMPLE AND RESEARCH METHOD**

### **5.1 Data and sample construction**

To answer the three questions of this study the paper includes an empirical study that contains 30 Finnish companies that has been chosen in a way that they represent the entire stock market of Helsinki (OMX Helsinki). This created data represents 27 percent of all non-financial companies in the Helsinki stock market and thus is a good quality sample with credibility. Part of the companies are little companies with a market value less than €150 millions while part is middle sized being over €150 millions and the rest are large companies with a market cap of over €1 billion. The data includes



20 percent of large companies, 33,33 percent of middle-sized companies and 46,67 percent of small companies. The reason why the data includes mostly small companies is that the Helsinki stock market contains over 50 percent of small companies. This way the relation between the stock market and data are keeping united and the data is more credible. The companies are also chosen in a way that they represent extensively the industries of companies in Helsinki stock market (See Appendix B) excluding financial industry because these companies have different sort of financing. Another criterion when choosing the companies was that the companies must have interest-bearing debt, or else we cannot assume that the company have covenants. After this the covenants of these companies are collected and presented in the results. We can expect that the companies use mostly financial covenants thus these are seen mostly in debt agreements (Roberts and Sufi, 2009).

The data will be also sorted into three different groups based on the financial covenant. First group contains only companies with capital covenants, the second group instead have companies with only performance covenants and the third one consist of companies with both types of covenants. The companies are then analyzed with eight different factors that measure the size of the company, leverage, performance, risk and the largest shareholder. After this I compare these three groups together and see if I find some differences between the groups.

I also divide these companies into four different created categories based on the quality of the representation of covenants in financial statement. The companies are then analyzed with the same eight factors. I try to find some explanations through these factors on the quality of the covenant representation. I calculate the averages of the results of the categories and compare them to the information quality level. All the calculation and information to these factors and their calculation are taken from the financial statement of the companies from the year 2016. The numbers for sales and EBIT for five years moving average of EBIT ratio are taken from the Orbis database.

## **5.2 Tools for analyzing**

This next section is going through the eight factors that are used for the analysis. These includes different variables that measure the performance, leverage, size, risk and largest shareholder.

### 5.2.1 EBIT ratio and five years moving average

$$EBIT-\% = \frac{EBIT}{sales} \quad (1)$$

$$EBIT-\% \text{ five years moving average} = \frac{1}{5} * \left( \frac{EBIT_{2012}}{Sales_{2012}} + \frac{EBIT_{2013}}{Sales_{2013}} + \frac{EBIT_{2014}}{Sales_{2014}} + \frac{EBIT_{2015}}{Sales_{2015}} + \frac{EBIT_{2016}}{Sales_{2016}} \right) \quad (2)$$

The first one is Earnings Before Interest & Taxes (EBIT) to sales, which indicates well the profitability of the company generated by its operations by ignoring the expenses from interest and taxes and thus ignoring the capital structure and tax burden of the company. This is a good and easy measure of the current profitability of the company. EBIT and EBITDA (earnings before interest depreciation and amortization) are typically adjusted with depreciation and amortization and other non-cash expenses and subtracted with capital expenditures, tax paid, stock repurchase or other cash distributions and non-cash income (Callahan et al., 2014).

Secondly, I took the moving average of five years of the companies' EBIT ratios. This includes EBIT and sales of the companies from years 2012 to 2016. By doing this we can see the trend of the companies' performances. When comparing the moving average to the result of 2016 we can see if the company has outperformed or underperformed its five years' average. Doing this we can search how a negative or positive trend EBIT ratio affect the covenants and their reporting. These numbers are searched from the database Orbis which contains company information and financial numbers.

### 5.2.2 Net Debt to EBITDA ratio

$$Debt \text{ ratio} = \frac{Net \text{ Debt}}{EBITDA} \quad (3)$$

The second one is net debt to earnings before interest depreciation and amortization (EBITDA) ratio. This ratio is a leverage measurement where the net debt is interest-bearing debt minus cash and cash equivalents divided by EBITDA. The ratio shows how many years it would take for the company to pay back its debt if EBITDA and net debt are held constant. The ratio gets a negative value if the company has more cash and cash equivalents than interest-bearing debt.

The ratio shows how the company can handle the debt burden with its operational performance and it takes into account the company's ability to decrease debt. Usually ratios that are higher than 4 or 5 are a typical level that when passing over it indicates that the company may be less able to handle debt burden. This ratio does not take into account interest, taxes, investments or changes in working

capital. It is still a good and quick estimate of the company's financial situation and therefore I chose to take this one to analyze reporting and companies with performance and capital covenants.

### 5.2.3 Net Gearing ratio

$$\text{Net Gearing} - \% = \frac{\text{Interest bearing debt} - \text{cash \& equivalents}}{\text{Shareholder equity}} \quad (4)$$

Net Gearing represent also the leverage of the company. It is calculated by reducing cash and cash equivalent from interest-bearing debt which is then divided by shareholder's equity. The ratio tells what is the relation between the capital invested by the shareholders and the borrowed interest-bearing money. (Kallunki, 2014) The higher the value gets the higher is the leverage. Therefore, net gearing is a typical and common covenant in debt contracting.

When the ratio gets a value of 100 it means that the amount of interest-bearing debt and equity's size are equal. When the ratio gets a value over 200 it is viewed as a concern, because the company is basically financed with interest-bearing debt which is twice as big as the equity in the company. Whereas if the ratio gets a value between 10-60 we can state that the company's leverage is in a good level and the company are able to carry the debt burden without problems.

The flaws in the ratio are that it does not take into account differences between the book value of equity and the market value of equity. The ratio is also calculated in different ways among different creditors. I chose this ratio because it is a very usual covenant and it shows how the financial risk is divided between the shareholders and debtholders. Because the ratio deducts the liquid cash from the interest-bearing debt the leverage represents more the actual indebtedness of the business operations which is comparable between companies (Kallunki, 2014).

### 5.2.4 Equity ratio

$$\text{Equity ratio} - \% = \frac{\text{Shareholder equity}}{\text{Total Assets} - \text{Advanced payments received}} \quad (5)$$

Equity ratio determines how much shareholders have money in the company. The ratio measures the company's capital adequacy, ability to cope with long-term commitments and loss tolerance (Balance consulting, 2006). This represents also the percentage amount the shareholders would receive if the company's assets were liquidated. It is calculated by dividing the amount of shareholders' equity by

the total assets of the company less advanced payments received (Kallunki, 2014). These assets are the total invested money in the company that produce income to the shareholders and debtholders.

The higher the ratio is the company's business is constructed to a more solid foundation. The values change between the industries but a ratio over 40 percent is a good level in general and less than 20 percent is a weak level (Kallunki, 2014). The equity act as a buffer against losses and financial distresses. Thus, it represents the power of the buffering effect and the higher it is the better the company can resist downturns while the smaller the ratio gets the more risk is associated with the company. This does not mean that companies cannot function well with high leverage, it means that even a little downturn can be dramatic the company.

The level of equity ratio depends usually of the age of the company and it seems that what a younger the company, the more it usually has leverage than companies that have existed longer in the industry (Balance consulting, 2006). This ratio is chosen to this study based on the good and easy measurement of the amount of equity and leverage financing and how much risk is involved.

#### 5.2.5 Interest-bearing debt to assets

Interest-bearing debt to assets illustrates how much of the company's assets are financed with interest-bearing debt. The more the company has interest-bearing debt the more the company contains risk due to the debt burden. I expect that the higher the ratio the tighter the covenants will get and the more restriction the debt contains. In principle, I expect that the more the company has interest-bearing debt the more likely it will report covenants in the financial statement. This is justified with the fact that the more the company has covenants, the more relevant they become to the stakeholders of the company.

#### 5.2.6 Size of assets and market value

The size of the assets shows how much money has been invested into the company. The market value of the company is instead the other size factor used in this study which also classifies companies to small, medium- and large sized companies. If the market value of the company is higher than the value of assets, the market is expecting greater performance in the future and vice versa. The market values are also taken from the financial statement which is the company's value in the end of the year 2016.

### 5.2.7 The largest equity holders

The largest equity holder of the companies is also taken from the financial statement of the companies which means that this study includes the largest equity holders in the end of 2016. The size of the share owned and who is the largest owner may have a connection on covenant reporting. It may also have a connection to the use of capital and performance covenant. This means that if the largest owner is for example a financial intermediary or a family we can find something interesting and different in these two cases.

As previous study shows, increase in the ownership of a single family increases the probability that the company's loans contains more covenants (Niskanen & Niskanen, 2004). This shows also that the more power is centralized to a party, it is more likely that the company have many covenants on their loans to restrict this power. Companies that have debt covenants are also less likely to be manager-owned (Niskanen & Niskanen, 2004). In these situations, it is interesting to find how this affects the covenant presentation in financial statement. Can we expect that the covenants are presented with a low quality because the largest owners and management are not willing to show them or with a poor quality? Or do they show the covenants with a high quality for better transparency. These questions are one reason why I took this factor into the study.

## 5.3 Covenant reporting quality categories

I have created four categories for the companies based on the information of the covenant reported in their financial statement. These categories are created with three questions based on the information given and the quality of the reporting in financial statement on debt covenants. The first question is "are there a mention about debt covenants?" the second one is "are there a more accurate description of them?" and the last one is "Do they mention the levels and restriction of the covenants?". As we see these questions are follow-up questions that shows the quality of the information given by the companies.

### 5.3.1 Category 0 - companies

The category zero companies do not report covenants in their financial statement. These companies do have interest-bearing debt which means that we can assume that they have covenants in their loans. This assumption is based to the fact that almost all credit agreements contain at least one financial covenant (Roberts and Sufi, 2009). These companies should raise questions to stakeholders on why

do they not mention anything about their covenants? Also, they should think about the company's true situation and potential risk in the future.

#### 5.3.2 Category I - companies

This category includes companies that inform about their covenant but do not answer the follow-up questions. An example to understand the category 1 companies is shown with an example from a Finnish company named Vikingline. The company said this about their covenants in their financial statement:

*“The loan agreement for financing M / S Viking Grace includes a market-based loan covenants.”*

As the example shows, the company does mention that they have a covenant but do not tell more accurately nor of the restrictions and levels. The quality of the information is modest in this type of companies and more information on the covenants would be favorable to stakeholders.

#### 5.3.3 Category II - companies

This category includes companies that answer the first two questions which means that they mention that they have debt covenants and they describe them more accurately. The example for this is a company from the data called Outotec:

*“The Group is subjected to certain capital requirements from the outside. Outotec's largest bank credit facilities include financial covenants related to equity ratio and liquidity. The Group has acted in accordance with covenants in 2006-2016.”*

This example shows well how the company answers the first two questions. It does not answer the third one because it does not tell the levels of the covenants. This type of companies has more information and gives value to the stakeholders. The quality is still not on its true potential because of the lack of covenant levels.

#### 5.3.4 Category III - companies

Finally, the category three includes companies that inform that they have covenants, they give a more accurate description and they report the levels of the covenants. As we see these companies

report the most information about their covenants. It is important to note that also companies that inform that their loans do not contain covenants belongs to this group. An example of the category three is shown with a Finnish company from the collected data called Solteq:

*“Distribution of income and ... The financial covenants (Incurrence Covenants) require that the equity ratio has to be over 27.5 percent in the time of review, interest cover (EBITDA / net interest) must exceed 3.00: 1 ratio and the groups interest-bearing / EBITDA do not exceed the ratio 3.50: 1...”*

This example answers well all the three questions and has a good quality of information. With the good quality and adequate information, the stakeholders can do better decisions regarding the company. When the company presents the covenants, it shows how the company is more transparent and the true situation of the company can be analyzed. With a good quality presentation, the potential risks of the company can be taken into better account.

## **6. RESULTS**

### **6.1 Covenants of Finnish companies**

The covenants were reported in 70.0 percent of the companies, 13.3 percent did not report anything and 10.0 percent reported that they have covenants but they did not give information on what these covenants were. 6.7 percent of the companies reported that their debt does not contain covenants. The most common covenant was equity ratio which was seen in 57.14 percent of the companies that reported their covenants. This covenant restricts the companies amount of debt by setting a threshold of equity to assets ratio that the company must maintain. This way the company can minimize the risk that comes from increased leverage.

The second most common covenant was net debt to EBITDA ratio which was in 47.6 percent of the companies that reported their covenants. There were also different combinations of this covenant, like interest-bearing debt to EBITDA (9.5 percent of reporting companies) and adjusted EBITDA (9.5 percent of reporting companies).

The third most used covenant was net gearing which was in 33.33 percent of reporting companies' debt. Net gearing is a good capital covenant that restrict the amount of net debt the company can have related to its equity. This way the creditor limits the ability to take too much leverage and higher risk with the expense of creditors. As we see the first three commonly used covenants are also used as

factors into the analysis in other parts of the study. Interestingly, capital covenants are dominating and they are used in 85.7 percent of the reporting companies. The use of performance covenants has a wider spectrum but they are less used.

**TABLE 1**

*Companies that report their financial covenants and how covenants are divided into capital and performance covenants*

Companies	Capital covenants			Performance covenants			
	Equity ratio	Net gearing	Net debt to EBITDA	interest-bearing debt to EBITDA	adjusted EBITDA	Interest coverage ratio	Debt-service coverage ratio
Outokumpu		x					
Amer Sports		x					
UPM		x					
Atria	x						
Finnair		x					
Pihlajalinna			x				
Trainers House							
Wulf-yhtiöt	x			x			
Efore	x		x		x		
Afarak Group		x	x			x	x
Comptel	x		x				
Solteq	x		x			x	
Martela	x		x				
Raute	x	x					
Outotec	x						
Tokmanni			x				
Stockmann	x						
Tulikivi	x		x		x		
Marimekko	x		x				
Consti yhtiöt		x		x			
Talenom	x		x				
Use of covenants-%	57,14 %	33,33 %	47,62 %	9,52 %	9,52 %	9,52 %	4,76 %

Other used performance covenant was inter alia interest coverage ratio which was on 9.5 percent of reporting companies. This ratio is usually calculated by dividing EBIT with interest expenses. The ratio measures how many times the company's interest payment can be paid with the current earnings. Setting a covenant restriction like this serve a purpose of keeping the borrower able to survive its interest payments. Debt-service coverage ratio which is the same type of ratio was seen in 4.8 percent of cases. The ratio is generally calculated by dividing EBIT with interest bearing debt. The ratio shows how many percent the performance can cover the interest-bearing debt. There was also a covenant restriction on the company's net asset value which is usually calculated by reducing liabilities from the total amount of assets. With this covenant the creditor can keep the amount of the borrowers' assets in a desired level. This way the company cannot liquidate assets nor take too much debt because these will increase the risk of covenant violation. If the borrower is struggling and it must liquidate assets, usually the creditor can give a permission against a higher interest rate or increased collateral (Roberts and Sufi, 2009).

Just a few company had negative covenant restriction. These covenants restricted the use of debt limit, dividend payments and share buybacks, related-party agreements, selling assets and changes in the fundamental nature of the business. These are typical negative covenants that prevent actions that the



creditor does not want the borrower to take (Nini et al., 2012; Niskanen and Niskanen, 2004). There was only one positive covenant that required the company to preserve intellectual property rights. As in previous study of Finnish companies shows, the negative covenants are much more common than positive covenants (Niskanen & Niskanen, 2004).

## 6.2 Differences of companies with capital and performance covenants

Companies with only capital covenants consist of large companies on average (market value €2662.5 millions). As we see from Table 2, there is only one small company and the rest are large and middle-sized companies. Interestingly, these companies do not have high leverage ratios. Net debt to EBITDA is 1.84 on average and net gearing is 21 percent which are low and the amount of interest-bearing debt is only 20 percent on average. The equity ratio is also in a good level (47 percent) and the highest compared to other groups. These numbers indicate that these companies have fairly, strong balance sheets on average which may be due the covenants that have restricted the opportunity for higher leverage. These companies did not violate the covenants in the current year which is in line with the findings. Finally, the other factors seem not to explain the use of capital covenants.

**TABLE 2**  
*Companies with only capital covenants*

Companies	EBIT 5 years moving average	EBIT (2016)	NetDebt/EBITDA	Net gearing	Equity ratio	Company size (€ millions)	Size	Market value (€ millions)	Share of the largest owner	The amount of interest-bearing debt to assets	Type of the company
Outokumpu	-2 %	2 %	3,50	51 %	49 %	5590,00	Large	3541,00	26 %	24 %	III
Amer Sports	6 %	8 %	2,02	53 %	37 %	2715,10	Large	2971,60	5 %	15 %	III
UPM	3 %	12 %	0,73	14 %	59 %	13911,00	Large	12452,00	1 %	17 %	III
Outotec	2 %	-6 %	0,61	-1 %	40 %	1427,00	Middle-size	914,10	15 %	16 %	II
Atria	2 %	2 %	2,71	51 %	47 %	909,44	Middle-size	324,80	30 %	24 %	III
Finnair	1 %	5 %	-0,36	-9 %	34 %	2528,70	Middle-size	516,40	56 %	28 %	III
Stockmann	0 %	2 %	9,66	69 %	48 %	2241,00	Middle-size	509,60	12 %	34 %	II
Raute	37 %	12 %	-4,18	-60 %	60 %	69,76	Small	70,20	15 %	4 %	III
Average	6,08 %	4,45 %	1,84	20,90 %	46,74 %	3674,00		2662,46	19,91 %	20,44 %	

Companies that had only performance covenants are middle-sized companies (See Table 3). There are only two companies in this group so strong conclusions cannot be drawn. However, these companies have a little upward trend in EBIT ratio. The ratio was 5.06 percent when the five years' average was 3.75 percent. This shows that the companies' performance restrictions have set pressure to the companies' performance and the companies have succeeded to retain them approximately the same level through years. However, the amount of interest-bearing debt is also relatively high which increases the probability that the companies' management have opportunistic accounting behavior (Taylor, 2013). Other factor does not seem to explain the use of only performance covenants.

**TABLE 3**  
*Companies with only performance covenants*

Companies	EBIT 5 years moving average	EBIT (2016)	NetDebt/EBITDA	Net gearing	Equity ratio	Company size (€ millions)	Size	Market value (€ millions)	Share of the largest owner	The amount of interest-bearing debt to assets	Type of the company
Tokmanni	3 %	6 %	1,80	68 %	36 %	458,60	Middle-size	500,40	31 %	38 %	II
Pihlajalinna	4 %	4 %	0,79	22 %	46 %	217,74	Middle-size	379,70	16 %	23 %	III
Average	3,75 %	5,06 %	1,30	44,88 %	41,36 %	338,17		440,05	23,05 %	30,32 %	

Interestingly, the third group that have both performance and capital covenants consist only of small companies (See Table 4). Small firm size is a determinant of a high agency cost that increase the demand for covenants which is in line with the results (Taylor, 2013). The performance of these companies is relatively low with an upward trend which can be seen in EBIT ratio which was 2.29 percent in 2016 and the five years moving average was 0.84 percent. The low performance may explain why these companies have performance covenants. The leverage factors are in a good level on average and seems not to explain the presence of neither performance nor capital covenants. Net debt to EBITDA was 2.00 and net gearing 54 percent which indicates of a good financial state. The other factors do not seem to explain the use of these two covenants.

**TABLE 4**  
*Companies with capital and performance covenants*

Companies	EBIT 5 years moving average	EBIT (2016)	NetDebt/EBITDA	Net gearing	Equity ratio	Company size (€ millions)	Size	Market value (€ millions)	Share of the largest owner	The amount of interest-bearing debt to assets	Type of the company
Wulf-yhtiöt	-0,29 %	1,01 %	2,42	19,96 %	50,50 %	25,43	Small	8,90	39,48 %	11,14 %	III
Efore	-5,70 %	-12,82 %	-1,31	99,47 %	15,70 %	48,30	Small	28,50	17,16 %	28,84 %	III
Afarak Group	-3,10 %	-0,66 %	-1,07	-3,32 %	67,70 %	260,20	Small	203,90	14,10 %	1,46 %	III
Tulikivi	-0,62 %	-4,46 %	13,80	125,02 %	33,13 %	37,40	Small	12,55	11,48 %	43,81 %	II
Comptel	4,36 %	11,00 %	0,01	0,54 %	47,48 %	94,89	small	258,70	18,80 %	10,00 %	III
Solteq	6,32 %	10,22 %	2,06	85,04 %	33,45 %	61,23	Small	28,50	26,00 %	42,06 %	III
Marimekko	3,04 %	5,27 %	0,27	8,82 %	58,50 %	48,49	Small	76,69	16,04 %	12,33 %	II
Martela	1,15 %	4,80 %	0,53	-18,90 %	45,26 %	56,20	Small	52,75	38,80 %	15,29 %	III
Consti yhtiöt	1,56 %	4,20 %	0,92	40,81 %	34,50 %	98,00	Small	116,00	6,03 %	21,82 %	II
Talenom	1,67 %	4,36 %	2,40	179,79 %	25,05 %	40,49	Small	49,00	23,00 %	55,57 %	II
Average	0,84 %	2,29 %	2,00	53,72 %	41,13 %	77,06		83,55	21,09 %	24,23 %	

In a previous study, small companies conceded covenants to creditors more willingly than larger companies (Taylor, 2013). This may also explain why these companies have these two types of covenants at the same time. When the company is willing to accept covenants, it is also more likely that the creditor set performance and capital covenants. This way the creditor can protect the debt from different angles and decrease the total risk of the borrowing. As shown before, the capital and performance covenants also decreases agency costs in different ways (Christensen and Nikolaev, 2012). This means that the creditor gain benefits by using performance and capital covenants at the same time, which is desirable when the company is small and thus contains more risk.

### 6.3 Covenant reporting quality

**TABLE 5**  
*Averages of the categories 0, I, II and III.*

Type of the company	EBIT 5 years moving average	EBIT (2016)	NetDebt/EBITDA	Net gearing	Equity ratio	Company size (€ millions)	Market value (€ millions)	Share of the largest owner	The amount of interest-bearing debt to assets
III	1,8 %	4,2 %	0,36	18,3 %	47,2 %	4181,60	3747,21	22,9 %	19,1 %
II	1,58 %	1,55 %	4,21	70,01 %	39,38 %	621,57	311,19	16,23 %	31,61 %
I	4,3 %	7,0 %	2,29	96,7 %	38,3 %	564,72	462,70	16,3 %	42,5 %
0	25,39 %	5,84 %	-3,00	-3,99 %	56,05 %	740,55	1569,55	19,33 %	20,22 %

#### Category – 0 companies

As we see from Table 5, category 0 companies that do not report anything of their covenants have a much higher EBIT on average (5.84 percent) in year 2016 and a much higher five year moving average (25.39 percent). The moving average is very high because of an outlier company who had a 67 percent average in five years. Therefore, I think that the downturn gives the wrong picture and we cannot draw conclusions based on it. The EBIT ratio is still high on average in 2016 and it have potential to explain why the covenants are not presented.

Interestingly, net debt to EBITDA ratio is negative (-3.00), which means that the companies have more cash and cash equivalents related to interest bearing-debt. This is backed with EBIT which has been positive and high, meaning that EBITDA must be positive too. Since the cash and cash equivalents are higher than interest-bearing debt, gearing has also a negative ratio (-3.99 percent). Because these companies have such a safe financial situation and a great liquidity, I claim that this is one of the reasons why the companies do not present covenants in their financial statement. Also, the amount of interest-bearing debt to assets (20.22 percent) is less than in other categories except for category one. The average Equity ratio of these companies (56.05 percent) is much higher compared to companies of the other categories which means that these companies have less leverage. The market value is also higher related to the size which means that the market is expecting good performance in the future. Previous study support the results suggesting, that the higher the market value related to the assets, the less the company have debt (Rajan and Winston, 1995). When the companies have less debt, they must have also less covenants which become less relevant. Because the companies have a such strong balance sheet, it explains why the companies do not present their covenants.

From these companies only one company has a family as a largest owner who has also a member as a board of director. Other of these companies have financial or non-financial companies as the largest

owner. We can see that there is no connection between the largest owner and the representation of covenants in companies of this category.

#### Category – I companies

Category one companies are the ones that only mention that their debt contain covenants but do not give more information about them. Based on the results these companies have a high level of five year moving average ratio of EBIT (4.3percent), and the EBIT seems to have a little upward trend (7.0 percent in 2016). The companies of this category have on average the highest leverage which can be seen in highest Net Gearing (96.7 percent), and in Net debt to EBITDA (2.29). The level of Net Gearing is in a more riskier level which is caused by the high amount of interest-bearing debt (42.5 percent to assets) and low level of cash flow and cash equivalents. The reason why Net debt to EBITDA ratio is not higher is because the companies have still generated an adequate amount of cash flow as seen from the performance ratio EBIT.

The high amount of net gearing may explain why the covenants are reported. The higher the net gearing the more likely these companies' loans have financial covenant restrictions (Citron, 1992). We can also assume them to report covenants because they become relevant due to high leverage. The equity ratio (38.3 percent) average is also less compared to the companies in other categories. The companies are on average middle-sized companies with a lower market valuation to assets. The company's largest owners are other companies which shows no connections to the quality of reporting.

#### Category – II companies

The companies in category 2 are small and middle size companies with a relatively smaller market value related to the size of the assets with high leverage. These companies have a much higher gearing (70.01 percent) on average than category 1 and 0 companies and it has the second most of interest-bearing debt to assets (31.61 percent). The net debt to EBITDA ratio is the highest of all groups (4.21). This indicates that the companies may have some difficulties on average with their debt burden in the future. The high level of net debt to EBITDA ratio is based to a low performance which can be seen in EBIT ratio which was the lowest (1.55 percent) without showing any moving trend (five years moving average is 1.58 percent).

I suggest that a high leverage and the increased risk that comes with it increases the quality of the covenant presenting. We can see from categories 0,1 and 2 that a higher level of Net Debt to EBITDA and a Net Gearing leads to a better quality of covenant reporting. The companies did not report any

covenant when the leverage ratios were low and equity ratio were high. Also, as we saw in category 1 where the leverage was high and the equity ratio was low the companies reported that they have covenants but with a poor quality. This is in line with the suggestion. The equity ratio (39.38 percent) is less compared to the other companies in category 0 and 3. The low equity ratios in categories 1 and 2 compared to the other groups can also explain the covenants reporting quality. They show that with a lower level of equity ratio, we can expect higher level of reporting.

Interestingly, 28.6 percent of the largest owners was the CEO of the company. And there were also companies with government or insurance companies as the largest owner. When the company seems to have the CEO as a largest owner the quality of the presenting is not superior, but the quality is still better than in categories 0 and 1. This is in line with previous study that suggest that management take less risks at high ownership level (Bagnani et al., 1994). When the company takes less risk, we can also assume covenant presenting.

#### Category – III companies

Large companies seem to be more likely to give good quality information about their covenants on average (company asset size €4181.6 millions on average and 47 percent of these category's companies are large). As we see from table 5, category three companies have clearly a much bigger company size based on assets and market value compared to other companies in other categories. I suggest that big companies have more to lose in their reputation than smaller companies, which may be one reason for the good reporting quality. However, 57 percent of all little companies belong also to this category. These companies have a strong balance sheet and performance on average which may explain why they report also their covenants with a superior quality. 18.75 percent of the large companies reported that their loans do not contain covenants. These companies have strong balance sheets and a good performance so the creditor does not need to set covenants if the costs of doing so is larger than the benefits from it.

What we can also see is that these companies have higher cash flows (EBITDA) related to Net Debt (Net debt to EBITDA is 0.36). This number indicates that these companies have probably high credit ratings and they have no problems to survive their debt burden on average. We can claim that because these companies have no problem with their debt burdens it is more likely that they are reporting all the covenants with good quality. When they are in a good position they do not need to hide anything, and there is no reason to give less information. Category three companies are having an upward trend in EBIT ratio based on the five years' ratio. The five years moving average was 1.8% while the EBIT

ratio was 4.2% in year 2016. This may also mean that the companies are more likely to present covenants with good quality when the performance is going upward. These companies have also on average the lowest amount of interest-bearing debt which is in line with the Net-debt to EBITDA ratio which indicates that these companies produce sufficiently cash-flow to survive the loans. As we see the net gearing of these companies is in a good level (18.3 percent), which indicates also that the companies have no problems with their debt payments. This shows also that the companies are freer financially and possibly more able to take additional debt since the equity ratio is relatively high on average (47.2 percent).

What is interesting with these companies is, that 31.25 percent of the companies' largest owners are insurance companies, 18.25 percent was the government (or a company of the government that monitors the companies). Based on the category 2 and 3 we can see that when the largest owner is either an insurance company or government the quality of the covenant presenting is higher. The government and insurance companies are reliable investors without dubious motives. This may explain the higher quality of the reporting.

## **7. CONCLUSIONS**

In this study, we have seen what covenants Finnish companies have in their debt agreements. The study analyzed 30 Finnish companies financial statement of the year 2016 with eight different variables that measured performance, leverage, size, risk and the largest shareholder. Then the companies were sorted into three groups based on the type of financial covenant they have. The first group contained companies with only capital covenant, the second with only performance covenants and the last group's companies had both type of covenants. These group were then analyzed with the eight factors to find differences between the groups. The other part of this study analyzed the quality of covenant reporting in financial statement. To do this I created four categories based on the quality of the information given about the companies' debt covenants where the companies were sorted and analyzed with the eight factors to see what affects the quality of information.

70 percent of the data's companies reported what covenants their debt contains. The most common one was equity ratio which was in 57.14 percent of the reporting companies. The second most used one was net debt to EBITDA ratio which was in 47.6 percent and the third one was net gearing ratio which was in 33.33 percent of reporting companies. Interestingly, capital covenants are much common and they are used in 85.7 percent of the reporting companies. Less used financial covenants were interest coverage ratio, debt coverage ratio, adjusted EBIT and interest-bearing debt to EBITDA.

This shows that performance covenants have a larger spectrum but they are less used. The companies had modestly negative and positive covenants of which negative covenants were much common. The same results were found in previous study on small Finnish companies (Niskanen & Niskanen, 2004).

In the second part, we saw that large and mostly big middle-sized companies had only capital covenants. Based on this I claim that the larger the companies are, the more probably the interest-bearing debt of these companies have capital based covenants. While companies that had only performance covenants were middle-sized companies. There were only two companies in this group, which shows how rarely performance covenants are used alone. These two companies had a smooth increase in performance in five years, which shows how the performance covenants may have brought pressure and the companies have succeeded to keep the performance above the level of covenant restriction. Because these companies have relatively large amount of interest-bearing debt previous study suggest that the smooth performance may be due to the opportunistic accounting choices of the management (Taylor, 2013). Also, high level of debt seems to have a positive correlation with the use of performance covenants which is in line with the findings (Christensen and Nikolaev, 2012).

Companies with both performance and capital covenants consisted only small companies. These companies had a poor performance on average, but a relatively strong balance sheet. Based on this I suggest that the smaller the company and the poorer the performance, the more likely companies contains both performance and capital covenants. This is justified with the fact that small companies have usually a greater need for more financing (Schiffer and Weder, 2001) and they are willing to offer covenants more readily than larger companies (Taylor, 2013). This is supported with previous study that found smaller companies finding harder to get financing (Schiffer and Weder, 2001). Small companies contain usually more risk which also explains why both type of covenants is used simultaneously.

The third part of the study was the analysis of covenant reporting quality in financial statement. The companies that did not report anything about their covenants had a much higher performance and market value related to assets and less leverage than companies that reported. These companies had also a higher equity ratio and more cash and cash equivalents on average related to interest-bearing debt which can be seen in negative values of leverage ratios. Companies that mentioned having covenant restrictions without the superior quality, showed high levels of interest-bearing debt and low levels of equity ratio compared to other groups. Interestingly, 31.25 percent of the companies with superior reporting quality have insurance companies and 18.25 percent have the government as

the largest owner. These companies are large ones on average and they had an increasing trend in performance and a strong balance sheet.

It seems that companies with good performances and strong balance sheets (low leverage and high equity ratios) are either reporting with superior quality because they have no motives to give less information, or they are not reporting covenants at all, because they do not think that reporting is relevant due to their financial situation. Companies that did not report have a higher market value related to assets whereas companies that reported with superior quality are having more probably the government or an insurance company as the largest owner. Finally, companies with high leverage ratios and low equity ratio are reporting more likely but to a certain point without giving adequate information.

These findings are relevant since they help stakeholders to understand what types of covenants we can expect Finnish companies to have which is helpful when analyzing companies that do not report covenants at all. We understand also what characters' companies have that have performance, capital or both types of covenants, which helps to understand what covenants we should expect from certain types of companies. Lastly, the reporting quality analysis offers information on what drives a good quality of reporting and why companies may give less information on covenants.

While shedding light on many issues, the results also raised additional questions. For example, does the quality of covenant reporting increase ex ante violations? Do companies change their covenant reporting policy according to their financial situation or do they keep it constant through time? And why capital covenants are much more common than performance covenants in Finland? I look forward to future research that addresses these and other related questions.

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## APPENDIX

### Appendix A: Financial covenants divided into performance and capital covenants

#### *Performance-based financial covenants:*

- Debt to EBITDA
- Senior debt to EBITDA
- Net debt to EBITDA
- Level of EBITDA
- Interest coverage ratio
- Fixed charge coverage ratio
- Debt service coverage ratio

#### *Capital-based financial covenants:*

- Net gearing ratio
- Senior leverage ratio
- Leverage ratio
- Debt-to-value ratio
- Debt-to-tangible net worth ratio
- Net worth requirement
- Debt-to equity ratio
- Current ratio
- Quick ratio

### Appendix B: Name, size and the industries of the companies

Companies	Industry	Size
Nokia	Technology	Large
Outokumpu	Metal Industry	Large
Neste	Oil and gaz	Large
Elisa	Telecommunications services	Large
Amer Sports	Consumer goods	Large
UPM	Basic Industry	Large
Outotec	Basic resources	Middle-size
Atria	Consumer goods	Middle-size
Finnair	The aviation industry	Middle-size
Tokmanni	Retail	Middle-size
Basware	Technology	Middle-size
Cramo	Industrial products and services	Middle-size
Pihlajalinna	Health care	Middle-size
F-secure	Technology	Middle-size
Stockmann	Consumer services	Middle-size
Vikingline	Travel and leisure	Middle-size
Trainers House	Management consulting	Small
Wulf-yhtiöt	Industrial products and services	Small
Efore	Industrial products and services	Small
Afarak Group	Basic Industry	Small
Tulikivi	Industrial products and services	Small
Comptel	Technology	small
Solteq	Technology	Small
Marimekko	Industrial design	Small
Martela	Industrial design	Small
Dovre Group	Industrial products and services	Small
Consti yhtiöt	Construction	Small
Raute	Industrial products and services	Small
Aspocomp Group	Industrial products and services	Small
Talenom	Management consulting	Small

## Appendix C: Companies divided by the quality of covenant reporting

Companies	EBIT 5 years moving average	EBIT (2016)	NetDebt/EBITDA	Net gearing	Equity ratio	Company size (€ millions)	Size	Market value (€ millions)	Share of the largest owner	Interest-bearing debt to assets	Type of the company
Outokumpu	-2 %	2 %	3,50	51 %	49 %	5590,00	Large	3541,00	26 %	24 %	III
Neste	4 %	10 %	0,45	18 %	50 %	7443,00	Large	9359,00	20 %	20 %	III
Amer Sports	6 %	8 %	2,02	53 %	37 %	2715,10	Large	2971,60	5 %	15 %	III
UPM	3 %	12 %	0,73	14 %	59 %	13911,00	Large	12452,00	1 %	17 %	III
Atria	2 %	2 %	2,71	51 %	47 %	909,44	Middle-size	324,80	30 %	24 %	III
Finnair	1 %	5 %	-0,36	-9 %	34 %	2528,70	Middle-size	516,40	56 %	28 %	III
Pihlajalinna	4 %	4 %	0,79	22 %	46 %	217,74	Middle-size	379,70	16 %	23 %	III
Trainers House	-26 %	11 %	-1,58	-22 %	61 %	11,95	Small	13,88	39 %	10 %	III
Wulf-yhtiöt	0 %	1 %	2,42	20 %	51 %	25,43	Small	8,90	39 %	11 %	III
Efore	-6 %	-13 %	-1,31	99 %	16 %	48,30	Small	28,50	17 %	29 %	III
Afarak Group	-3 %	-1 %	-1,07	-3 %	68 %	260,20	Small	203,90	14 %	1 %	III
Comptel	4 %	11 %	0,01	1 %	47 %	94,89	Small	258,70	19 %	10 %	III
Solteq	6 %	10 %	2,06	85 %	33 %	61,23	Small	28,50	26 %	42 %	III
Martela	1 %	5 %	0,53	-19 %	45 %	56,20	Small	52,75	39 %	15 %	III
Raute	37 %	12 %	-4,18	-60 %	60 %	69,76	Small	70,20	15 %	4 %	III
Outotec	2 %	-6 %	0,61	-1 %	40 %	1427,00	Middle-size	914,10	15 %	16 %	II
Tokmanni	3 %	6 %	1,80	68 %	36 %	458,60	Middle-size	500,40	31 %	38 %	II
Stockmann	0 %	2 %	9,66	69 %	48 %	2241,00	Middle-size	509,60	12 %	34 %	II
Tulikivi	-1 %	-4 %	13,80	125 %	33 %	37,40	Small	12,55	11 %	44 %	II
Marimekko	3 %	5 %	0,27	9 %	59 %	48,49	Small	76,69	16 %	12 %	II
Consti yhtiöt	2 %	4 %	0,92	41 %	35 %	98,00	Small	116,00	6 %	22 %	II
Talenom	2 %	4 %	2,40	180 %	25 %	40,49	Small	49,00	23 %	56 %	II
Cramo	9 %	14 %	1,84	74 %	46 %	1155,76	Middle-size	1057,50	11 %	34 %	I
Vikingline	3 %	3 %	2,62	36 %	44 %	497,90	Middle-size	281,59	15 %	38 %	I
Aspocomp Group	-3 %	3 %	0,71	12 %	68 %	15,74	Small	10,39	20 %	10 %	I
Elisa	19 %	21 %	2,00	116 %	38 %	2533,00	Large	5176,00	10 %	46 %	0
Basware	67 %	-9 %	-2,14	9 %	59 %	227,00	Middle-size	520,60	11 %	21 %	0
F-secure	13 %	12 %	-3,78	-122 %	67 %	159,40	Middle-size	552,60	38 %	6 %	0
Dovre Group	2 %	0 %	-8,10	-18 %	60 %	42,80	Small	29,00	18 %	8 %	0